## VA Office of Information and Technology Enterprise Architecture Management



## Systems Integration and Development Service

# Unique Identifiers Instruction CM314

Version 1.0

June 14, 2006

#### **Letter of Promulgation**

As the Director of the Systems Integration and Development Service (SIDS) within the Office of Enterprise Architecture Management, Department of Veterans Affairs, Office of Information and Technology, I do hereby formally promulgate and approve this instruction and direct its use across the SIDS. This instruction establishes, defines, and describes the rules and systematic approach for formulating and applying unique identifiers to all files and other items selected for formal configuration control within the SIDS.

(Signature obtained and on file)

6/14/06

Frances G. Parker, Director (Acting)
Systems Integration and Development Service
Office of Enterprise Architecture Management
VA Office of Information and Technology

(Date)

## **Record of Changes**

CCP#	CCP Date	Description of Change (or title)	Date Entered	Entered by: (initials)
N/A	N/A	Initial issue as version 1.0	6/14/06	bgl

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#### 1. INTRODUCTION

#### 1.1. PURPOSE

This instruction provides the standard convention for unique identification of all items placed under formal configuration control. The identifiers resulting from this unique-identifier convention provide all concerned with a common reference link when performing related tasks, reviewing work, reporting defects, requesting/making enhancements, performing audits, and providing comments or reports.

#### 1.2. SCOPE

This instruction applies to all items of all tasks and projects selected and designated for configuration control by the SIDS Configuration Change Management Board (CCMB) or higher authority.

Approval of a written Request for Waiver (RFW) to the Director, SIDS, is required for non-compliance with any section or subsection of this document. An RFW may be submitted by email to the Director until such time as an official RFW procedure and template are adopted by SIDS.

#### 1.3. AUTHORITY

The Director, SIDS, is the issuing authority for this document and only the Director, SIDS, or higher authority may authorize it to be altered, superseded, or cancellation. Any changes or modifications to this document must be submitted for approval in accordance with the SIDS Configuration Management Plan.

Any conflict between this document and higher authority will be resolved in favor of the higher authority. Anyone observing such a conflict is requested to bring it to the immediate attention of the Director, SIDS (or delegated SIDS authority).

#### 1.4. CHANGE AND CANCELLATION

This is an original document and does not supersede a previous version or any other document.

#### 1.5. REFERENCES

N/A

#### 1.6. DEFINITIONS AND ABBREVIATIONS

#### 1.6.1. Definitions

Refer to the Systems Integration and Development Service (SIDS) Configuration Management Plan.

#### 1.6.2. Abbreviations

The following abbreviations are used in this procedure. This table does not include abbreviations used as examples or possible data entries in identifiers.

CCMB - Configuration Change Management Board

CM - Configuration Management

RFW - Request for Waiver (or Deviation)

SIDS - Systems Integration and Development Service

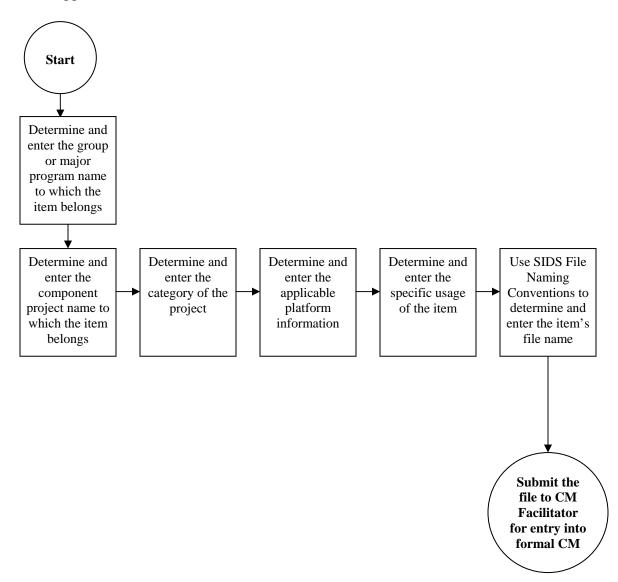
TBD - To Be Developed

#### 1.7. ASSUMPTIONS

This instruction assumes that the user has a working knowledge of computerized word processing programs and applicable CM automation tools for entering identifiers and file labels.

#### 2. PROCESS DIAGRAM

This procedure provides the technical instructions for the construct of configuration item unique identifiers. The process diagram that follows addresses the use of this standard rather than the application of the information it contains.



#### 3. INSTRUCTIONS

#### 3.1. DESCRIPTION

CI Identifiers provide the data for quickly and accurately distinguishing a specific CI or component (down to the revision or version/release level). The designated program, project, or function lead, assisted by a CM specialist (and with approval of the controlling CCMB), determines the composition of identifiers in accordance with the conventions below.

#### 3.2. CONFIGURATION ITEM IDENTIFIER CONVENTION

The identifier, appearing on each item, component, or element of a configuration item, is incorporated into CM library notations. This arrangement facilitates the tracking of changes to the CI (or a component), its status, and associating components when assembling baselines. This identifier convention serves two primary purposes:

- 1. Allows for unique identification of every file and part of a configuration item, and
- 2. Provides the electronic file path to the file baseline set.

The following example is taken from the software section below to explain the sequence of elements in the identifier.

#### GROUP-PROJECT NAME-CATEGORY-PLATFORM-USAGE-NAME-REVISION

All identifiers will follow the construct of seven fields, but appropriate substitutions are allowed to accommodate variations in the subject matter of the identified materials (e.g., the GROUP field may be replaced by an organization name if the subject matter pertains to operational management documents such as this one. Specific conventions appear in the sections as indicated and the user should refer only to the needed section:

Organization Management	3.3.1
Software Applications	3.3.2
Databases	3.3.3
Computer Hardware	3.3.4
Networks	3.3.5
Non-Computer Hardware	3.3.6
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#### 3.2.1. Group or Organization

GROUP (or ORGANIZATION) usually identifies the organization system or a major system group to which the item belongs. A major system group may consist of a single component subsystem or many component subsystems. For example, SIDS is an organization system, OneVA is a major system with several software and database subsystems, and ExecVA is a system consisting of a single component subsystem.

#### 3.2.2. Project Name

PROJECT NAME identifies the project, product, effort, or specific sub function to which the item belongs. PROJECT NAME is an alphanumeric field, often abbreviated, identifying the specific subset to which the item belongs. If not pre-designated by higher authority, the project manager and the CM facilitator will propose a suitable name for approval. The following are *hypothetical* examples of each Project Name type:

REGELG – Registration and Eligibility (an application with database)

ENGRSTA – <u>Engineer's workstation</u> (desktop configuration specifically for engineers)

VACOLAN - VA Central Office Local Area Network

TWP12 – Tech World Plaza, floor 12

SIDSDEV – <u>Systems Integration and Development Service Development group</u>

VHAHOME – Veterans <u>Health Administration Home</u> page.

**NOTE:** The Project Name may be a repeat of the GROUP (or Organization), especially if the category is Management (MGT).

#### 3.2.3. Category

CATEGORY identifies the general functional category to which the item primarily belongs. The category field contains an abbreviation consisting of not more than four alphabetic characters and indicates the primary general functional type of the product, project, or effort to which a file pertains. The following are category abbreviations:

APL – Software or database application or script, or database

DBS – Database

CHW – Computer Infrastructure Hardware

EQP – Equipment (non-computer)

FAC – Facilities MGT – Management NWK – Network WEB – Web

#### 3.2.4. Platform

PLATFORM identifies the operating system or database management system to which a variant of a given item belongs or its primary usage. In cases such as management documentation, PLATFORM will identify the general form or format of the file.

Within a given category of configuration item, the platform abbreviation indicates that the file is intended for use for, on, or in a specific operating system, database management system, type of computer hardware, facility, or equipment, a management subject area or medium, or a function/type of Web asset. For example, a software application named REGE would be of the category "APP." If both UNIX and Windows 2003 variants of a source code module were required, then from the category, the variant source code files would be identified as:

...-APP-REGE-UNIX-SRC-filename-etc. for the UNIX variant, and

...-APP-REGE-WN03-SRC-filename-etc. for the Windows 2003 variant

#### 3.2.5. Usage

USAGE identifies the specific intended function of the item contents. An example in software would be "SRC" for source code. In management documentation, "Proc" is a procedure.

#### 3.2.6. Name

NAME identifies the specific component or element name. NAME is assigned in accordance with SIDS file naming conventions for types of files (Refer to SIDS File Naming Procedure – TBD). The name may be the literal name of the file or an alphanumeric code (e.g., this document identifies the file name as CM314 and an internal CM procedure identifies the subject. Similarly in software, a name such as "Signature Module," "SigMod," or "Module01" might be used. (NOTE: The same NAME may appear in different projects but the preceding fields will indicate to which "set" the item belongs.)

#### 3.2.7. Revision

REVISION identifies the specific iteration of a file so the user can find the specific iteration used for a given version.release.minor fix of the "released" configuration.

#### 3.3. IDENTIFIERS BY CATEGORY TYPE

#### 3.3.1. Organization Management

Organization management includes all documentation (publications) addressing management functions or areas. For the most part, the management documentation will consist of policy, plan, procedure, and guidance publications and templates for forms and reports. Identifiers for organization management files placed under configuration management will adhere to the convention below (without spaces). For files reflecting management of a software or database project, see either of the next two sections, whichever is appropriate.

#### ORG - FUNCTION - CATEGORY - USAGE - FORMAT - NAME - REVISION

ORG identifies the organization that exercises configuration change management over the item AND to which the item applies. Most organization management artifacts are generated internally and are under configuration control of the organization that generated them. In some cases, such as an organization charter, however, configuration control belongs to the organization that issued the charter, not to the sub organization to which it applies. Therefore, the ORG field would reflect the senior organization that issued the charter.

Up to four additional letters may be appended (total of eight letters, maximum) to represent VA sub-organizations. The following abbreviations are reserved:

#### Sorted by abbreviation:

Abbreviation	Organization
ASCLA	Assistant Secretary for Congressional and Legislative Affairs
ASHRA	Assistant Secretary for Human Resources and Administration
ASMGT	Assistant Secretary for Management
ASOIT	Assistant Secretary for Office of Information and Technology
ASPIA	Assistant Secretary for Public and Intergovernmental Affairs
ASPPP	Assistant Secretary for Policy, Planning, and Preparedness
OITCIS	Cyber and Information Security
OITEAM	Information and Technology Enterprise Architecture Management
OITITO	Information and Technology Operations
OITPPP	Information and Technology Policies, Plans & Programs
OITSIDS	Office of Information and Technology, (Enterprise Architecture
	Management,) Systems Integration and Development Service
ONEVA	(Logo name for an integrated veterans' services program)
VAAAC	Austin Automation Center
VANCA	National Cemetery Administration
VASEC	Secretary of Veterans Affairs
VAVBA	Veterans Benefits Administration
VAVHA	Veterans Health Administration

#### Sorted by office:

Organization	Abbreviation
Assistant Secretary for Congressional and Legislative Affairs	ASCLA
Assistant Secretary for Human Resources and Administration	ASHRA
Assistant Secretary for Management	ASMGT
Assistant Secretary for Office of Information and Technology	ASOIT
Assistant Secretary for Policy, Planning, and Preparedness	ASPPP
Assistant Secretary for Public and Intergovernmental Affairs	ASPIA
Austin Automation Center	VAAAC
Enterprise Architecture Management, Systems Integration and Development	OITSIDS
Service	
Information and Technology Cyber and Information Security	OITCIS
Information and Technology Enterprise Architecture Management	OITEAM
Information and Technology Operations	OITITO
Information and Technology Policies, Plans & Programs	OITPPP
National Cemetery Administration	VANCA
Secretary of Veterans Affairs	VASEC
Veterans Benefits Administration	VAVBA
Veterans Health Administration	VAVHA
Veterans' Services Program, Logo for	ONEVA

FUNCTION identifies either the project name or the management component to which the item belongs. (In the latter case, FUNCTION will usually indicate a management sub function such as Risk or Requirements Management, Quality Assurance, etc. FUNCTION may be a repeat of the ORG field if the item belongs directly to the senior organization level, for example, an organization management plan.

The following is a list of the most common organization function names and abbreviations:

Function	Abbreviation
Finance	FIN
Quality Assurance	QA
Requirements Management	RQM (includes Requirements Definition)
Risk Management	RKM
Configuration Management	CM
Human Resources	HRM
Security (Physical)	SEPH
Security (Cyber and Information)	SECI
Operations	OPNS
Executive	EXEC
Measurement and Analysis	MNA
Monitoring and Control	MNC
Supplier Agreement Management	SAM
Projects	(applicable project abbreviation)

CATEGORY for organization management files will always be MGT (Management).

USAGE identifies the specific function of the file contents in the MGT category, for example, "PLAN (for plans)," "PROC" (procedure), "INST" (Instruction), and "PRSS" (for Process Map). In the CHW and Workstation (WSS) categories, USAGE identifies the use of the equipment, (for example, SVR for server or CPU for a desktop computer).

FORMAT identifies a general type of file that results when a file is printed (i.e., nothing to do with file extensions). Examples include "DOC" (document), "DWG" (drawing, schematic, and diagram), "TBL" (table), etc.

NAME identifies the specific component or element file name. NAME is assigned in accordance with SIDS file naming conventions for management configuration files. (Refer to SIDS File Naming Procedure – TBD). Together, NAME and REVISION (explained below) identify to the viewer the exact file needing work. NAME may be the literal name of the

file, an abbreviation for the name, or an alphanumeric code. For example, configuration management (CM) documents are coded by CM function (the 200-series address configuration identification). (NOTE: The same NAME may appear in management sets, but the preceding fields will indicate to which "set" the item belongs, thus creating a unique identifier. SIDS will have established naming conventions for all files.)

REVISION is a number created within Serena Dimensions that identifies the specific iteration of a given configuration item. Revision is NOT the same as version/release. The revision number is maintained by Dimensions and identifies iterations of a file as it changes over time. When a file is released (or published), the specific file iteration (revision) is labeled with the appropriate number of the version/release; thus the user can identify the specific iteration used to publish a document, software, drawing, etc.

#### 3.3.2. Software Applications and Databases

Identifiers for software application and database product artifacts (that is, parts of the product) adhere to the convention below. Identifiers for product *management* artifacts should be in compliance with organization management provisions in the preceding section. (NOTE: This section does not include configurations of development and control tools, which are treated as computer hardware components.)

#### GROUP-PROJECT-CATEGORY-OS/DBMS-USAGE-NAME-REVISION

GROUP identifies the generic name of the major software system to which the application belongs. The system may consist of a single software application or several software sub systems. For example, ExecVA is a single, standalone application, but OneVA is a program consisting of several software applications and databases.

PROJECT identifies the specific component application or database to which the item belongs. For example, VAMPPIR is a system consisting of an application called VIS and a database called VAMPPIR. Therefore, the first two fields for the application portion would appear as "VAMPPIR-VIS-..." and, for the database portion, would appear as "VAMPPIR-VAMPPIR-..." For a system that consists of only itself such as ExecVA, the field be repeated, for example, "ExecVA-ExecVA-..."

CATEGORY for applications will always be APPL. (VAMPPIR-VIS-APPL-...) CATEGORY for databases will always be DTBS. (VAMPPIR-VAMPPIR-DTBS-...)

If the item is a combination of software and a database, determine the primary function of the item. Use this primary function, application or database, to determine which of the above to use. This determination will also affect the OS/DBMS field. (NOTE: If an item is a combination, it probably should be decomposed further and the components/elements identified separately.)

OS/DBMS are used respectively for software and databases to identify:

a. The operating system for an OS specific variant (for example Windows or Unix) of a software component to which the item belongs, or

b. The database management system for a DBMS specific variant (for example Oracle or SQL) of a database component to which the item belongs.

For a software source code file originally built for Windows NT operating system and later upgraded to a Windows 2003 variant, the PLATFORM field identifies the two variants (WinNT and Win2003). The PLATFORM for project management files will usually be MGT. The following are the acceptable software platforms with respective identifiers:

OS Platform	<b>Abbreviation</b>
DOS	DOS
Linux	LINX
Linux Red Hat	LXRH
Linux SuSe	LXSS
Linux Mandrake	LXMD
Unix	UNIX
Windows 2000	WN2M
Windows 2003	WN03
Windows 95 (97, 98)	WN95 (97, 98)
Windows NT	WNNT

<b>DBMS Name</b>	Abbreviation
MS Access	ACCS
MySQL	MySQL
Oracle 8.0.1.5	OCL8.0.1.5 <sup>+</sup>
Oracle 9i	OCL9i <sup>+</sup>
Sybase	SYB
<sup>+</sup> As indicated by the	two Oracle

As indicated by the two Oracle entries, the abbreviation for each iteration may be formed by appending an appropriate sequence to reflect the applicable variation of the DBMS.

USAGE identifies the specific intended function of the file contents. Examples in software include "SRC" for source code and MANUAL for a User's Manual. For a database, BATCH would indicate a batch script; DDL would identify a Data Definition Language file. Project management files will use such function names as "Plan," "Proc," "Inst," etc.

<u>Usage</u>	Abbrev.
Batch	ВСН
Data Definition Library	DDL
Data Element Dictionary	DED
Data Modification Library	DMS
Database Designs (documents and drawings)	DSN
Design	DSN
Documentation	DOC
Executable	EXE

<u>Usage</u>	Abbrev.
Project Management	MGT
Queries	QRY
Reports	RPT
Schemas	SCH
Scripts	SPT
Software Version Description	SVD
Source Code	SRC
Stored Procedures	SPR

<u>Usage</u>	Abbrev.
Form	FRM
Glossary	GLS
Hardware Version Description	HVD
LOB Requirements	LOB
Macro	MCR
Manuals	MAN
Modules	MOD

<u>Usage</u>	Abbrev.	
System Requirements	SRS	
Specification	SKS	
System Version Description	SVD	
System/Sub-System	SSR	
Requirements	SSK	
System/Sub-System	SSS	
Specification	333	
Table	TBL	
Training	TRN	
Trigger	TRG	

NAME identifies the specific component or element name. NAME is assigned in accordance with SIDS file naming conventions for software configuration files (Refer to SIDS File Naming Procedure – TBD). NAME may be the literal name of the file or an alphanumeric code as long as the viewer can find the file needing work. For a software application, this field might be descriptive (e.g., "Colors") or coded as (e.g., Module01). Sample names for a database component file and element might be "NameDDL" or simply "DDL01." (NOTE: The same NAME may appear in different projects but the preceding fields will indicate to which "set" the item belongs, thus creating a unique identifier.)

REVISION is a number created within Serena Dimensions that identifies the specific iteration of a given file. Revision is NOT the same as version.release. Within Dimensions, version.release numbers are entered on a file label of the relevant revision file and the specific revision used for the release can be found by performing a query.

#### 3.3.3. Computer Hardware

The convention below is to be followed to develop identifiers for computer hardware (CHW). As the phrase implies, computer hardware is hardware associated with electronic data processing as opposed to tangibles (Equipment) for other purposes. The SIDS has configuration responsibility over a few CHW pieces, most notably the configuration management (CM) servers and the files containing configuration information for the CM applications. CHW may include workstation configurations at a later date.

#### ORG-FUNCTION-CATEGORY-EQPNAME-USAGE-NAME-REVISION

ORG identifies the <u>org</u>anization responsible for the day-to-day management of the item. For the SIDS CM servers and files, the ORG field will be SIDS. If and when other CHW is placed under positive configuration control, other organizations may be indicated.

FUNCTION (or LOCATION) will always be one of the following: CHW for computer hardware, or WSS (rarely used) for workstation setup, i.e., a unique type of user workstation, for example, a special database development setup.

CATEGORY identifies the generic <u>category</u> of the CHW item to which the file belongs, such as "SVR" (server), "MON" (monitor), WKS (workstation computer), etc.

Category	Abbreviation
Monitor	MON
Printer	PTR
Server	SVR
Workstation computer	WKS

EQPNAME identifies the name of the piece of CHW addressed (for example, one of the SIDS configuration management servers is named "vacoappccm1"). For the WSS category, EQPNAME will be a suitable abbreviation to refer to the specific type of workstation being referenced (for hypothetical example, "DBENGRSR" for a senior database engineer).

USAGE identifies the specific functional type of the file contents. Examples in hardware include "HVD" (<u>h</u>ardware <u>v</u>ersion <u>d</u>escription), "COTS" (<u>c</u>ommercial <u>off</u> the <u>s</u>helf software), "DWG" (drawing, schematic, and diagram), "TBL" (table), etc.

Usage	Abbreviation
Commercial Off The Shelf Software	COTS
Diagram	DWG
Drawing	DWG
Hardware Version Description	HVD
Hub	HUB
Router	RTR
Schematic	DWG
Server	SVR
Switch	SWTC
Table	TBL
Technical Specifications	SPC
Uninterrupted Power Supply	UPS

NAME identifies the specific component or element file name. NAME is assigned in accordance with SIDS file naming conventions for computer hardware configuration files (Refer to SIDS File Naming Procedure – TBD). NAME and REVISION (explained below), identifies for the viewer the exact file needing work. NAME may be the literal name of the file, an abbreviation for the name, or an alphanumeric code. For example, configuration management (CM) documents are coded by CM function (the 200-series address configuration identification). (NOTE: The same NAME may appear in multiple management sets, but the preceding fields will indicate to which "set" the item belongs, thus creating a unique identifier.)

REVISION is a number created within Serena Dimensions that identifies the specific iteration of a given file. Revision is NOT the same as version.release. Within Dimensions, version.release numbers are entered on a file label of the relevant revision file and the specific revision used for the release can be found by performing a query.

#### 3.3.4. Networks

Currently, SIDS has no responsibility for managing Local Area Networks (LAN) or Wide Area Networks (WAN).

#### 3.3.5. Non-Computer Hardware

Currently, SIDS has no responsibility for managing non-computer hardware.

#### 3.3.6. Facilities

Currently, SIDS has no responsibility for managing Facilities.

#### 3.3.7. VA Intranet and Web

Currently, SIDS has no responsibility for managing the VA Intranet or Web interfaces.

### **ATTACHMENT 1 - Unique Identifier Checklist**

1	1. CM Representative, receive CI component List from Product Lead.
2	2. CM Representative, meet with the Product Lead to obtain information for composing the identifier.
-	a. Short name
-	b. Platform identifier
_	c. Usage identifier
3	3. CM Representative and Product Lead combine the information to make the identifier.
	4. CM Representative, assign the appropriate Version/Release number.
-	a. If a new product in development, assign "1.0".
-	b. If implementing CM on an existing CI, assign the updated Version/Release number.
5	5. Product Lead, submit copy to CM Manager for CCB Review.
6	6. CM Representative, update the CML setup to accommodate list selections and Identifiers.
7	7. CM Representative, upon approval by the customer, file and baseline approved list. (If modified by customer, file by new revision number.)
8	B. CM Representative, ensure Product Lead has copy available.
9	O. CM Representative, ensure QA Representative has copy available for requirements traceability, reviews, and verifications.